

Protective effects of saffron extract against consolidation Impairment memory induced by magnetic field in rats

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Abstract

Exposure to magnetic fields can effect on the learning and memory. The protective effect of saffron extract on memory consolidation disorders in rats exposed to magnetic fields was investigated. 120 male Wistar rats in 12 groups exposed to magnetic field For 5 days with intensity 2.5 tesla for 1, 3 and 5 hour and protective effects of saffron extract with doses of 125 mg, 200 mg and 300 mg ($P \leq 0.05$) compared to the control group by passive avoidance learning method in shuttle box. One hour exposure with magnetic field had no effect on the rats' memory consolidation ($P \leq 0.05$). Increase exposure time to 3 and 5 hours had a memory consolidation Impairment compared to the control group ($P \leq 0.05$). Administered rats with 300 mg Inter peritoneal saffron extract improved memory consolidation ($P \leq 0.05$) compared to the control group. Exposure to magnetic fields 2.5 mT, 50 Hz impair memory consolidation. Saffron aqueous extract at a dose of 300 mg per kg may have a protective effect and be improvement consolidation impairments.

Key words: Magnetic fields, Consolidation memory, Aqueous extract of saffron.

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